Upcoming Events

Over the next few months TechFire will be welcoming entrepreneurs, innovators, technologists, business professionals, and industry experts to attend our TechFire events and programs. We are planning several key events at TechFire for the community – look for "IgNITES," (TechFire networking events), "Spark Sessions, (an engaging TechFire lecture series with guest speakers) and "Firestorms!" (our own version of targeted brainstorming sessions within our network).

On December 5th, we had our first "IgNITE!" – our first opportunity to introduce our business community to some of our client companies, service providers, and team! Join us in January for our next event and check our website for details.

In addition to "IgNITES", "Spark Sessions" will feature a lecture series on entrepreneurship, technology, industry and business best practices. We will also have Tech Showcases and technology events in the coming months and they will feature new and innovative companies in our Southern Maryland innovation network.

Come join our entrepreneurial ecosystem, to network and make some valuable connections in the high-tech community! For more information on our events visit our website at:

www.TechFireNetwork.com

Strategic Update

Welcome to the inaugural edition of TechFire News.

It was about this time last year that an idea was formed to create an innovation network in Southern Maryland, in keeping with Energetics Technology Center, Inc. (ETC's) charter to be a catalyst for science and technology development in the region. After doing a fair amount of due diligence, and seeing an opportunity to capitalize on the rich intellectual capital in Southern Maryland, ETC launched what we now call TechFire, our technology incubator +. (The + comes from the idea that we will offer more than traditional incubation, looking to create programs and opportunities for all technology-focused entrepreneurs, with a special focus on veteran, minority and female entrepreneurs). Fast forward to today, key staff is now in place, mentors and service providers engaged, and the first companies desiring incubation services in the fold. To say that the last 12 months have been a blur would be an understatement, yet that is life in the start-up world.

A major impetus for creating TechFire was the recognition of the intersection of three important phenomena in Southern Maryland. First and most critical is the level of scientific and engineering talent in the region. In just the last 10 years, there have been over 1800 patents assigned to residents of Charles, Calvert and St. Mary's counties,

indicating a depth of technical talent critical to technology development. Second is the growing concern about the degree to which the region is dependent on direct federal jobs, and in particular jobs linked to the Defense Department. Thus, job diversification is on the minds of many business and government leaders concerned about a healthy Southern Maryland economy. Third is the recognition of the emerging field of autonomous and control systems, and key leadership roles already occupied in the field by Maryland organizations. Taken together these three phenomena spell opportunity in capital letters for the region.

We look forward to engaging you in our efforts to make Southern Maryland a hotbed of technology and entrepreneurship, creating a robust economy and future for all.
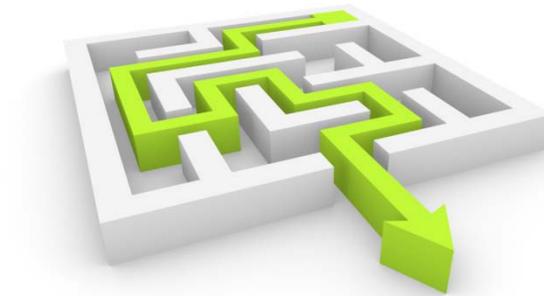
Bob Kavetsky, President ETC

Top 5 Tips on Market Research

By Kim Mozingo

Market Research is a "must- do" for all businesses, and it's not necessarily a once-and-done event. It is critical for new tech startups to understand their market to successfully position their product or service BEFORE they get too far into development. Check out the following tips according to Forbes and the Harvard Business Review to get started:

1. Fully understand your target market. Do potential customers know they need your product or service? Where would they go to purchase your product? How would they find it / search for it? Where is it displayed?

2. Define the edge. Define what sets you apart from others in your field. What differentiates you? Why would someone buy from you rather than a competitor? Price? Service? Quality? Delivery?

3. Do your homework. Get demographic information from local chambers of commerce, the US Census Bureau, the SBA,TechFire, etc. Try the SBA's new tool, SizeUp,(http://www.sba.gov/tools/sizeup) to find your competition and get ideas for the best places to advertise.

4. Conduct research with primary sources. Use interviews, surveys, questionnaires, and focus groups to help identify critical information about price and features, as well as the strengths and weaknesses of competitors.

5. Be prepared to change. Your great idea or product might not be exactly what consumers are looking for. Use the data to decide where to pivot. Be flexible and adapt as needed. Are there minor changes you can make for broader appeal?

Did you find these tips helpful? For more information on conducting Market Research, watch our blogs at: www.techfirenetwork.com

TechFire
Director's Cut

Our focus is quality mentorship for small technology businesses in Southern Maryland …

Technology startups, early-stage businesses and those in transition often encounter significant risk, well beyond their technologies. Many times risk can be traced to changing markets or customers and the lack of proper back-office business support structures and processes. The same skill sets that allowed for design, prototype and technical build of a company's first high-tech products are necessary yet insufficient to cope with business risk. Often times, the small startup is overwhelmed at entrepreneurship; from market research, sales and establishment of a customer base, to growth and advanced back-office know-how. These can be the 'great unknowns' or a 'step-beyond' for most technologists. As technicians, they would likely prefer to focus on improving technologies versus building the business around them. Yet, despite these certain risks, there is a way to get the tailored assistance required to realize high-tech market goals – and it is located right here in Southern Maryland!

At ETC, we recognize the challenges facing technology startups because we are a growing technology firm ourselves. ETC has designed a solution to these challenges – Meet TechFire! – our own brand of technology business incubation, designed to provide quality entrepreneurial mentorship to technology businesses and connect technology-based companies to our regional innovation network. ETC opened TechFire's

doors only a few months ago and now ETC has accepted several companies into incubation, with more in the admissions process. We are currently working with four local technology businesses. These companies include:

ThorUs Dynamics – a software company with unique and potentially revolutionary video-compression algorithms that can be used to stream live 4K technology without resolution loss, among other software solutions.

A-JAC Services – a software and IT management and infrastructure development firm, specializing in IT setup - including help-desk, hardware, mail-room, and routing services.

Excess Technologies – a unique, 3D printer technology company with designs for printers and matching software, including media to appeal to and teach children the art of CAD design.

Kingdomware Technologies® – develops custom web, software, data & mobile applications solutions that automate processes. They also provide web based mass notification, incident management, document storage, human relations and indirect rates calculations.

TechFire's special differentiator is not only our model, it's our people. TechFire hosts two serial entrepreneurs who serve to help tech-firms with strategy and prioritization. At TechFire, we call these professionals

Entrepreneurs-in-Residence and they are: John Sullivan – a prolific inventor and patent holder with 30 patents to his name, and Dan Roche, who, as a software entrepreneur, has started several software companies that have gone public. ETC has also partnered with two successful incubator consultants, including Ann Lansinger, who built a successful incubator that graduated over 273 companies worth 1.65 Billion in private equity. Add to our crew Shirley Collier, a serial entrepreneur, a technology business owner and plank-owner of Neo-Tech (now the Maryland Center for Entrepreneurship in Howard County) – and you have the dream-team of entrepreneurial incubation professionals for small businesses. In addition, ETC linked with Gene Lauer, a successful local government leader who brings over 30 years of Southern Maryland community service to bear for our businesses. We now exist to foster smart technology growth in Southern MD!

TechFire has a new website at www.techfirenetwork.com – our community's 'virtual' link to a robust, regional entrepreneurial eco-system and support network! Whether you are a mentor, service provider, or just considering incubation — we look forward to meeting you and including you in the network!

Come join your Southern Maryland team and visit us online, or, in person at 10400 O'Donnell Way St. Charles, MD (301-645-6637).

Technology Business Incubator Breeds Success

Did you know that between 70% and 90% of technology startups fail? Ever wonder why?

Frequently, failure is due to a lack of expertise in business management and back-office operations, versus technology product failures. One of the most important pre-sales functions that startups can miss is market research. Market research is a structured process for identifying the true market for a technology or business service, in contrast to guesswork or just assuming a 'cool idea has yet to take off'. Market research, done well, relies on data to support decisions. It's a specialized area of business operations that requires patience, open mindedness, and usually a

level of expertise most startups (and some established businesses) lack. Good market research usually requires interviews and focus groups to determine what customers need, if those needs are presently being met, and at what price point they can be met more economically. In comparison to a technology prototype, market research can answer "who might buy this product and why?" or "what product do they want instead? and "can we pivot to provide it?" – a critical strategic value assessment. In many ways, market research can offer tremendous insight to a small business.

Once market data is accumulated, how does one sort the signal from

the noise? Quite frankly, most technology startups do not have the necessary knowledge or expertise to conduct this research appropriately. This is where incubation helps to decrease business risk and increase business confidence going forward.

At ETC, we understand the challenges facing small, technology businesses and we designed TechFire to assist. ETC has already helped local tech companies establish solid footing and contracts through quality market research and analyses. Check out our blogs on Market Research at:
www.techfirenetwork.com

Some of TechFire's Southern Maryland Connections

All three Southern Maryland counties have websites that provide a wealth of information for businesses. Check them out for expert advice and support and be sure to sign up to receive their newsletters:
- Calvert County Economic Development: http://www.co.cal.md.us
- Charles County Economic Development (Techfire Partner): http://www.meetcharlescounty.com
- St. Mary's County Economic Development: http://www.co.saint-marys.md.us/decd/

Naval Air Warfare Center Aircraft Division: http://www.navair.navy.mil/nawcad/ TechFire is partnered with NAWCAD to find technologists and entrepreneurs to bring NAWCAD licensed technology to market.

The Charles County Technology Council: http://www.thetechcouncil.net/ A TechFire Partner, the CCTC offers educational and networking events for its members.

Southern Maryland Innovation & Technology Meet Ups: http://www.meetup.com/Southern-Maryland-Innovation-and-Tech/SMIT brings together entrepreneurs, inventors, developers, researchers, mentors, investors and the broader entrepreneurial community on the third Wednesday of every month.

PaxSpace: www.paxspace.org. Become a member of this 'maker space' to gain access to the tools and equipment you need, and then visit www.techfirenetwork.com to bring your innovation to market. Look for a partnership in the future!

The Patuxent Partnership (TPP): www.paxpartnership.org. To stay on the cutting edge of science and technology and to enhance your education and professional development, join the TPP's email list.

The Small Business & Technology Development Center Network: http://www.sbdchelp.com/ The SBTDC network offers a wealth of information and classes focused on creating successful businesses. And they offer one-on-one support to small, local startups.

TechFire Team

Bob Kavetsky is the President of Energetics Technology Center and has 35 years of experience in leading technology development efforts in hypersonic aerodynamics, energetic systems, and mine warfare.

Keith Gordon is a recently retired Naval Aviator and ETC's Director of TechFire. Prior to retiring from active duty Keith worked directly for the Chief of Naval Operations as his senior technology Fellow in the CNO's Strategic Studies Group.

Elan Moritz is the Chief Scientist at ETC, and has over 37 years of high technology development and leadership experience. Dr. Moritz holds 14 U.S. Patents.

Theresa Ohle serves as TechFire's Coordinator—orchestrating the daily activity in the innovation network, while supporting marketing and entrepreneur recruitment efforts.

ETC has engaged the following Incubator, Communications and Economic Development Professionals, as consultants:

Ann Lansinger is a former President of Baltimore's Emerging Technology Centers—Baltimore's successful technology incubator.

Shirley Collier is past Chair of the Board of the Howard County Economic Development Authority, responsible for the Maryland Center for Entrepreneurship.

Gene Lauer served over 30 years in local government and as Charles County Administrator from 1996-2004.

Kim Mozingo is President of The Conwell Group, Inc. and has 30 years of communication experience.

Small Business Can Tap into Federally Funded Research

By Shirley Collier

Shirley Collier is a consultant to the Energetics Technology Center, Inc., and CEO of TechGrowth, "inspiring economic development through technology transfer and entrepreneurship." www.techgrowth.org

The federal government spends approximately $250 billion annually in R&D, most of which is intended to be commercialized. However, the vast majority of the resulting intellectual property (IP) languishes – an untapped source of innovation and economic development for this country.

Market research has indicated that small to mid-sized technology oriented businesses know little about the availability of IP developed by federal laboratories throughout the country. Yet, they are in constant search of innovation to help them serve their customers, remain competitive and respond to regulatory pressure. The STTR program, coordinated by the Small Business Administration, assists 5 agencies in providing funding for the transfer of technologies from a university or government laboratory to a small business, but does not accommodate the matching or partnering of the two entities. It is the responsibility of small businesses and entrepreneurs to seek out innovations from federal institutions.

Many large companies (IBM, GE, Northrop Grumman, Monsanto, etc.) are aware of and spend huge sums of money to monitor federal research activities, seeking big payoff opportunities that will produce a minimum market capitalization of $50M - $100M. Most transfers of technology from federal labs and universities occur with a small number of large companies according to the Department of Commerce. That leaves many technically and financially viable federally funded innovations – intended for commercial use - untapped. The federal agencies we interviewed as well as our independent analyses of their IP portfolios indicate that **many of these innovations, while they may not be of interest to large publicly traded companies, solve important societal problems and could be highly attractive financially to smaller businesses**.

The timing is right. President Obama issued a Presidential Memorandum in October 2011 instructing federal agencies to improve their processes to result in MORE transfer of federal research into the private sector. Government laboratories have pledged to be more receptive to and accommodating of the small to mid-sized business community.

TechFire will be offering mentorship and other forms of assistance to help regional entrepreneurs and small innovative businesses understand and navigate the technology evaluation and licensing processes with federal laboratories located in the Greater Washington area. TechFire seeks to shape viable, high payoff commercial products in the process!